

14. MUKILTEO—CLINTON

The Mukilteo-Clinton ferry route connects Snohomish County (south of Everett) with south Whidbey Island; this route is approximately 2.3 nautical miles with a crossing time of 20 minutes. In general, the 1999 annual ridership for the Mukilteo-Clinton ferry route included 2.0 million passengers and 2.3 million vehicles and drivers, for a total of 4.3 million riders, or 11,780 riders per day. For the month of May of 1999 during which the survey was conducted, average daily ridership on this route amounted to 12,095 riders.

Key trip making information and geographic travel patterns for patrons of this route are presented herein. Additional route-specific survey tabulations and results for all three survey periods, including ferry user demographic information, can be found in Appendix B.

14.1 TRIP MAKING INFORMATION

14.1.1 Weekday Trip Statistics

Weekday trip statistics presented here are grouped into three topics:

- Trip purpose and usage frequency;
- Travel modes and round-trip patterns; and
- Desired transit improvements.

The focus of these results is primarily on the PM peak survey period, contrasting the peak results with the PM non-peak period for key items such as trip purpose and wait times.

Trip Purpose

Table 14-1 and Table 14-2 summarize trip purposes and frequencies for the weekday PM peak period and non-peak period for the Mukilteo-Clinton route, respectively. The majority of riders utilized the ferry route for work/school or business related purposes in both periods. When compared to results of the 1993 survey, the distribution across trip purposes is similar, with the majority of trips being undertaken for commute-oriented travel.

Similar trends regarding the frequency of riders and the trip purposes could be observed for both the peak and non-peak periods. Specifically, for frequent riders of the Mukilteo-Clinton route (10 or more rides in the past 7 days) the majority of trips was work/school or business related. Additionally, appointments/personal business/other trips as well as social/recreational/shopping/sight-seeing trips were made most by somewhat infrequent ferry riders (2 to 5 rides in the past 7 days).

Table 14-1
Trip Purpose and Frequency of Use Distribution
Mukilteo-Clinton – Weekday PM Peak Period

<i>Frequency of Use / Trip Purpose</i>	<i>Work/School/ Business Related</i>	<i>Medical Appt./ Personal Business/ Other</i>	<i>Social/ Recreational/ Shopping/ Sight-seeing</i>	<i>All Trip Purposes</i>	<i>Expanded Ridership Total</i>
1st Ride in Past 7 Days*	6.5%	19.8%	23.7%	12.6%	427
2 to 5 Rides in Past 7 Days	13.4%	50.1%	50.8%	28.0%	951
6 to 9 Rides in Past 7 Days	13.7%	14.2%	9.5%	12.8%	435
10 or More Rides in Past 7 Days	56.6%	5.9%	6.3%	36.7%	1,245
No Answer	9.7%	10.1%	9.8%	9.8%	332
Totals	100.0%	100.0%	100.0%	100.0%	3,391
Overall Trip Purpose Distribution	60.6%	16.7%	22.7%	100.0%	
Expanded Ridership	2,054	568	769	3,391	

* 1st Ride in Past 7 Days includes passengers who answered: 1st ride in past year and 1st ride ever.

Table 14-2
Trip Purpose and Frequency of Use Distribution
Mukilteo-Clinton – Weekday PM Non-Peak Period

<i>Frequency of Use / Trip Purpose</i>	<i>Work/School/ Business Related</i>	<i>Medical Appt./ Personal Business/ Other</i>	<i>Social/ Recreational/ Shopping/ Sight-seeing</i>	<i>All Trip Purposes</i>	<i>Expanded Ridership Total</i>
1st Ride in Past 7 Days*	7.0%	16.1%	39.1%	17.5%	368
2 to 5 Rides in Past 7 Days	21.8%	60.0%	50.3%	40.8%	857
6 to 9 Rides in Past 7 Days	15.7%	15.3%	7.4%	13.6%	285
10 or More Rides in Past 7 Days	44.4%	3.9%	2.1%	21.4%	450
No Answer	11.1%	4.7%	1.1%	6.7%	140
Totals	100.0%	100.0%	100.0%	100.0%	2,099
Overall Trip Purpose Distribution	44.3%	32.1%	23.7%	100.0%	
Expanded Ridership	929	673	497	2,099	

* 1st Ride in Past 7 Days includes passengers who answered: 1st ride in past year and 1st ride ever.

Table 14-3 below describes trip origin and destination types by direction in the weekday PM peak period for the Mukilteo-Clinton ferry route. This route clearly displays directional peaking, with nearly 69% of all trips occurring in the westbound direction. More than 63% of all westbound trips were trips originating at work or school and going to home. In the eastbound direction, the largest percentage of riders are going from some other place to home (29%) or from home to some other place (21%). The general trends for trip types found for respondents to the May 1999 survey are similar to those observed in the May 1993 survey.

Table 14-3
Trip Origin and Destination Types by Direction
Mukilteo-Clinton – Weekday PM Peak Period

<i>Origin & Destination Types</i>		<i>Destination Shares Across All Origins:</i>			<i>Expanded Ridership Total</i>
<i>Origin Place</i>	<i>Destination Place</i>	<i>Eastbound Trips</i>	<i>Westbound Trips</i>	<i>Both Directions</i>	
Home	Home	3.6%	0.3%	1.4%	46
	Work/School	5.9%	0.3%	2.1%	71
	Other	20.7%	2.4%	8.2%	277
Work/School	Home	16.6%	63.9%	49.0%	1,662
	Work/School	2.9%	0.8%	1.5%	50
	Other	7.8%	1.6%	3.6%	121
Other	Home	29.1%	27.1%	27.7%	940
	Work/School	2.1%	0.7%	1.1%	37
	Other	11.4%	2.8%	5.5%	186
Totals		100.0%	100.0%	100.0%	3,391
Travel Direction Distribution		31.5%	68.5%	100.0%	
Expanded Ridership		1,068	2,323	3,391	

Travel Modes and Round-Trip Patterns

The round-trip patterns and methods for the PM peak period are summarized in Table 14-4. Nearly 80% of all riders were found to be on the second half of a round-trip, approximately 80% of those riders reported that they were returning on the same day and 74% reported using the same ferry route. Of the 18% of riders on the first half of a round trip, 67% reported they would return on the same day, while 12% said they would return some other day, compared to 4% of riders on their second half of a round trip. Nearly 5% of PM peak riders indicated that the other half of their round-trip either used a different ferry route or did not use the ferry system at all.

“Nearly 5% of PM peak riders indicated that the other half of their round-trip either used a different ferry route or did not use the ferry system at all.”

Table 14-4
Round-Trip Patterns and Methods
Mukilteo-Clinton – Weekday PM Peak Period

<i>Round-Trip Segment & Method / Time</i>	<i>Today</i>	<i>Some Other Day</i>	<i>No Answer</i>	<i>Expanded Ridership</i>
Declared Initial Trip				78.7%
(Reported on 2nd Half of Round-Trip)				
Same Ferry Route	74.2%	4.0%	14.0%	2460
Not Using Ferry System	1.9%	0.4%	0.4%	75
Different Ferry Route	0.4%	0.1%	0.1%	19
No Answer	2.2%	0.1%	2.0%	116
<i>Total Declared Initial Trip</i>	<i>78.7%</i>	<i>4.7%</i>	<i>16.6%</i>	<i>2669</i>
Expected Return Trip				18.0%
(Reported on 1st Half of Round-Trip)				
Same Ferry Route	57.1%	12.1%	8.6%	476
Not Using Ferry System	5.0%	3.0%	0.0%	49
Different Ferry Route	0.6%	1.2%	0.0%	12
No Answer	4.5%	1.3%	6.7%	76
<i>Total Expected Return Trip</i>	<i>67.2%</i>	<i>17.6%</i>	<i>15.2%</i>	<i>612</i>
No Answer				3.3%
(Did Not Report Round-Trip Status)				
<i>No Answer</i>			<i>100.0%</i>	<i>111</i>
Expanded Ridership Total	2,513	232	646	3,391

Access and egress mode shares and boarding mode distributions from the 1993 survey were modified to approximate 1999 Travel Survey methods and data collection procedures for comparison purposes. However, the 1993 results are not directly comparable to the expanded survey results based upon the data collected in 1999. Please see Section 3.5.2 in Chapter 3 for a detailed explanation of these procedures. These modified percentages can nonetheless be used for generalized comparisons, as presented in the following discussion.

Boarding, access and egress information for PM peak period riders on the Mukilteo – Clinton ferry route is shown in Table 14-6. The modal distribution for this route is similar to that found for the Edmonds – Kingston route, with approximately 20% walk-on passengers and just over 80% boarding in a vehicle, which is similar to findings from the 1993 survey.

It also appears that there has been a significant change in how walk-on passengers are getting to and leaving the ferry terminal. In 1999, nearly 50% of walk-on riders reported accessing the ferry terminal by bus or shuttle, or about 10% of total ridership. In 1993 the share of walk-ons using transit to access the terminal was about 28%. Similar findings apply to walk-on passengers as they are leaving the ferry terminal. In fact, the share of walk-on riders using bus or shuttle modes to access and egress the ferry terminals have nearly doubled since the 1993 survey. This increase in passengers using transit to access and egress from the ferry terminal is likely due to the increase in transit service on both sides as well as improved response to the access/egress mode questions.

“Walk-on riders using bus or shuttle modes to access and egress the ferry terminals have nearly doubled since the 1993 survey.”

Table 14-5
Access Mode to Ferry – Boarding Method – Egress Mode from Ferry
Mukilteo-Clinton – Weekday PM Peak Period

<i>Access Mode to Ferry Terminal</i>	<i>Percent Distrib.</i>	<i>Boarding Method</i>	<i>Percent Distrib.</i>	<i>Mode Shares</i>	<i>Egress Mode from Ferry Terminal</i>	<i>Percent Distrib.</i>
Pedestrian/Bicycle	8.9%	Walked-On		19.4%	Pedestrian/Bicycle	7.9%
By Vehicle*	43.4%	Pedestrian	99.5%		By Vehicle*	41.9%
By Bus or Shuttle	47.7%	Pedestrian w/ Bicycle	0.5%		By Bus or Shuttle	50.2%
Total	100.0%	Total	100.0%		Total	100.0%
In-Vehicle	100.0%	In-Vehicle		80.6%	In-Vehicle	100.0%
		Vehicle Drivers*	72.2%			
		Vehicle Passengers	27.8%			
		Total	100.0%			
Total				100.0%		
Expanded Ridership Total				3,391		

* includes motorcycles

Wait time distribution by boarding mode is presented for PM peak and PM non-peak period riders in Table 14-6 and Table 14-7, respectively. Over 70% of all walk-on passengers, regardless of PM peak or PM non-peak status, waited 10 minutes or less to board a Mukilteo – Clinton ferry. During the PM peak period, over half of in-vehicle boarding passengers waited 11 to 13 minutes to board a ferry and 30% waited 10 minutes or less. During the PM non-peak period 95% of passengers boarding in a vehicle waited less than 30 minutes, with a relatively even split between those waiting less than 10 minutes and those waiting 11 to 30 minutes.

Table 14-6
Wait Time Distribution by Boarding Method
Mukilteo-Clinton – Weekday PM Peak Period

<i>Wait Time Category / Boarding Method</i>	<i>Walk Board (Pedestrian & Bicycle)</i>	<i>Vehicle Board (Driver & Passenger)</i>	<i>Expanded Ridership Total</i>
Zero to 10 Minutes	70.2%	29.1%	1,257
11 to 30 Minutes	28.0%	55.3%	1,694
31 to 60 Minutes	0.5%	10.5%	290
61 to 90 Minutes	0.0%	0.5%	15
More Than 90 Minutes	0.0%	0.1%	4
No Answer	1.3%	4.5%	132
Totals	100.0%	100.0%	
Expanded Ridership	659	2,732	3,391

Table 14-7
Wait Time Distribution by Boarding Method
Mukilteo-Clinton – Weekday PM Non-Peak Period

<i>Wait Time Category / Boarding Method</i>	<i>Walk Board (Pedestrian & Bicycle)</i>	<i>Vehicle Board (Driver & Passenger)</i>	<i>Expanded Ridership Total</i>
Zero to 10 Minutes	79.4%	44.9%	1022
11 to 30 Minutes	15.3%	49.8%	964
31 to 60 Minutes	2.6%	1%	32
61 to 90 Minutes	0.0%	0.4%	7
More Than 90 Minutes	0.0%	0.0%	0
No Answer	2.6%	3.6%	73
Totals	100.0%	100.0%	
Expanded Ridership	233	1,866	2,099

Table 14-8 displays parking information for those passengers who walked on board the ferry vessel. Most walk-on passengers appear to park on at least one side of the ferry route, typically paying for parking and either walking off the ferry or receiving free parking on the other side. Approximately 30% of walk-on passengers did not park on either side or did not supply enough information to determine if they parked at all. The percentage of riders who either paid for parking on both sides or received free parking on both sides is about the same at 7%. The average cost paid by walk-on riders varies from \$1.85 to \$3.57.

Table 14-8
Walk-Board Passenger Parking Statistics
Mukilteo-Clinton – Weekday PM Peak Period

<i>Reported Parking Characteristics</i>	<i>Expanded Ridership</i>	<i>Percent of Total</i>	<i>Average Total Parking Paid*</i>
Used Paid Parking on Both Sides	45	6.9%	\$3.57
Used Paid Parking One Side & Free Parking Other Side	78	11.8%	\$2.77
Used Free Parking on Both Sides	47	7.2%	\$0.00
Paid Parking One Side & Did Not Park Other Side or Insufficient Information	137	20.8%	\$1.85
Free Parking One Side & Did Not Park Other Side or Insufficient Information	150	22.8%	\$0.00
Did Not Park on Either Side or Insufficient Parking Information	201	30.5%	NA
Totals	659	100.0%	

*Only surveys with a reported dollar amount paid for parking were included in the average cost calculation (those with free parking were excluded).

Desired Transit Improvements

Table 14-9 and Table 14-10 provide the distribution of transit improvements desired by PM peak period and PM non-peak period riders respectively. Generally, both PM peak riders and PM non-peak riders desire the same transit improvements. The most commonly listed transit improvement is the request for service within 2 blocks of their origin or destination, at about 25%. Service at both ends of the ferry route and more park-and-ride lots/spaces were the second and third most requested transit improvement.

Table 14-9
Transit Improvements Desired
Mukilteo-Clinton – Weekday PM Peak Period

<i>Transit Improvement</i>	<i>Distribution</i>	<i>Expanded Ridership</i>
Service within 2 Blocks of Origin or Destination	25.7%	872
Service at Both Ends of Ferry Route	13.1%	444
Seamless Connection between Ferry & Bus	9.1%	308
Employer Paid or Subsidized Bus Pass	4.8%	164
More Park & Ride Lots/Spaces Available	12.4%	422
None of the Above/No Answer	26.9%	912
<i>Frequent Write-In Comments</i>		
More Passenger Only Service	1.5%	51
Lower Park & Ride Parking Fees/Free	3.2%	107
More Park & Ride Information	2.2%	75
"Other" Comments	1.1%	38
Totals	100.0%	3,391

Table 14-10
Transit Improvements Desired
Mukilteo-Clinton – Weekday PM Non-Peak Period

<i>Transit Improvement</i>	<i>Distribution</i>	<i>Expanded Ridership</i>
Service within 2 Blocks of Origin or Destination	23.0%	483
Service at Both Ends of Ferry Route	11.9%	250
Seamless Connection between Ferry & Bus	5.1%	108
Employer Paid or Subsidized Bus Pass	4.2%	89
More Park & Ride Lots/Spaces Available	12.2%	257
None of the Above/No Answer	32.5%	682
<i>Frequent Write-In Comments</i>		
More Passenger Only Service	0.8%	16
Lower Park & Ride Parking Fees/Free	3.9%	81
More Park & Ride Information	5.5%	116
"Other" Comments	0.8%	17
Totals	100.0%	2,099

14.1.2 Sunday Trip Statistics

Sunday trip statistics presented here are grouped into two categories:

- Trip purpose and usage frequency; and
- Travel modes and round-trip patterns.

Trip Purpose

Trip purpose information for Sunday survey period respondents is displayed in Table 14-11. Not surprisingly, 75% of all Sunday survey respondents on the Mukilteo – Clinton ferry route were traveling for social/recreational/sightseeing purposes, considerably higher than during the weekday PM peak and non-peak periods. In general, the 1999 survey results are quite similar to the 1993 survey results, both with a clear majority of recreation based trips.

As has been found previously, Sunday survey period respondents are on average less frequent ferry riders than weekday PM peak or PM non-peak riders, with nearly 75% reporting 5 or fewer rides in the past 5 days.

Table 14-11
Trip Purpose and Frequency of Use Distribution
Mukilteo-Clinton – Sunday Survey Period

<i>Frequency of Use / Trip Purpose</i>	<i>Work/School/ Business Related</i>	<i>Medical Appt./ Personal Business/ Other</i>	<i>Social/ Recreational/ Shopping/ Sight-seeing</i>	<i>All Trip Purposes</i>	<i>Usable Responses</i>
1st Ride in Past 7 Days*	14.3%	17.1%	31.7%	28.0%	266
2 to 5 Rides in Past 7 Days	31.2%	54.6%	45.3%	45.6%	434
6 to 9 Rides in Past 7 Days	20.8%	9.2%	6.2%	7.9%	75
10 or More Rides in Past 7 Days	24.7%	9.2%	5.0%	7.3%	69
No Answer	9.1%	9.9%	11.8%	11.3%	107
Totals	100.0%	100.0%	100.0%	100.0%	951
Overall Trip Purpose Distribution	8.1%	16.0%	75.9%	100.0%	
Usable Responses	77	152	722	951	

* 1st Ride in Past 7 Days includes passengers who answered: 1st ride in past year and 1st ride ever.

Travel Modes and Round-Trip Patterns

Round-trip patterns for Sunday survey period respondents are presented in **Error! Not a valid bookmark self-reference..** The majority of Sunday survey respondents reported they were on the second half of a round-trip, similar to weekday PM half-day riders. Of those on the second half of a round-trip, 53% reported they were returning on the same day, while 36% were returning on a different day, with the majority of these riders using the same ferry route. Thirty-five percent of the Sunday survey respondents reported the surveyed ferry ride as the first-half of a round-trip, of these 71% reported that they would return on the

same day. Generally, Sunday survey period respondents had a much higher percentage of persons reporting they would return on a different day (28%) compared to PM peak period riders (7%), which is not unexpected.

Table 14-12
Round-Trip Patterns and Methods
Mukilteo-Clinton – Sunday Survey Period

<i>Round-Trip Segment & Method / Time</i>	<i>Today</i>	<i>Some Other Day</i>	<i>No Answer</i>	<i>Usable Responses</i>
Declared Initial Trip (Reported on 2nd Half of Round-Trip)				62.0%
Same Ferry Route	41.7%	28.6%	9.2%	469
Not Using Ferry System	8.3%	4.7%	1.4%	85
Different Ferry Route	1.5%	1.9%	0.0%	20
No Answer	1.4%	0.3%	1.0%	16
<i>Total Declared Initial Trip</i>	<i>52.9%</i>	<i>35.6%</i>	<i>11.5%</i>	<i>590</i>
Expected Return Trip (Reported on 1st Half of Round-Trip)				35.5%
Same Ferry Route	58.6%	10.4%	8.9%	263
Not Using Ferry System	8.0%	2.7%	2.1%	43
Different Ferry Route	1.8%	2.1%	0.0%	13
No Answer	3.0%	0.6%	2.1%	19
<i>Total Expected Return Trip</i>	<i>71.3%</i>	<i>15.7%</i>	<i>13.0%</i>	<i>338</i>
No Answer (Did Not Report Round-Trip Status)				2.4%
<i>No Answer</i>			<i>100.0%</i>	<i>23</i>
Usable Responses	553	263	135	951

Wait time distribution by boarding method for the Sunday survey period respondents is presented in Table 14-13. Generally, Sunday survey period respondents reported waiting longer to board a Mukilteo – Clinton ferry. These longer waits were particularly evident for those ferry passengers boarding in a vehicle. Approximately 70% of vehicle-board passengers waited 11 to 60 minutes, with a larger share waiting 11 to 30 minutes. As was found for PM half-day walk-on passengers, most walk-on respondents on Sunday waited 10 minutes or less, but the percentage waiting 11 to 30 minutes increased to 35% , up from 28% in the PM peak and 15% in the PM non-peak. Longer waiting times for Sunday survey period respondents may be due to increased recreational travel that is not schedule dependent, as well as unfamiliarity with vessel sailing times.

Table 14-13
Wait Time Distribution by Boarding Method
Mukilteo-Clinton – Sunday Survey Period

<i>Wait Time Distribution / Boarding Method</i>	<i>Walk Board (Pedestrian & Bicycle)</i>	<i>Vehicle Board (Driver & Passenger)</i>	<i>Usable Responses</i>
Zero to 10 Minutes	58.3%	19.3%	221
11 to 30 Minutes	35.4%	46.8%	434
31 to 60 Minutes	2.1%	23.9%	206
61 to 90 Minutes	0.0%	3.0%	26
More Than 90 Minutes	0.0%	0.7%	6
No Answer	4.2%	6.3%	58
Totals	100.0%	100.0%	
Usable Responses	96	855	951

14.2 GEOGRAPHIC TRAVEL PATTERNS

This section provides tables and map figures which present the locations for ferry user trip origins and destinations. Of key interest for updating the WSF travel demand forecasting model are the PM peak period origin-destination (O-D) trip tables by travel direction, presented as expanded PM peak ridership volumes and distributions for all modes, as well as for walk-on and in-vehicle boardings. Similar O-D trip tables presenting unexpanded Sunday survey period distributions are also provided. Complementing the PM peak and Sunday trip tables are two sets of map figures. The first set shows the geographic flows of origins and destinations, including route district percentage distributions, for all trips by direction. The second set of maps illustrates the directional densities of trip origins and destinations, using different pinpoint symbols to delineate walk-on and in-vehicle boarding methods.

14.2.1 Weekday PM Peak Period Trip Patterns

Origin and destination locations for westbound ferry travelers on the Mukilteo – Clinton route are summarized in Table 14-14 and graphically displayed in Figure 14-1. It appears that destination locations on Whidbey Island have shifted slightly northward for westbound travelers during the weekday PM peak period, in comparison to 1993 survey results. While the percentage of riders with destinations in the north Whidbey Island district remain about the same, the percentage of riders with destinations in the central Whidbey Island district has increased about seven percent from the 1993 survey.

Origin locations for riders of the Mukilteo – Clinton ferry also appear to have shifted slightly northward as well. Compared to the 1993 survey, the percentage of riders coming from the greater north Seattle district has dropped slightly, while locations to the north, like the Mountlake Terrace, Lynnwood/Edmonds districts have increased. Riders coming from the Mountlake Terrace, Lynnwood/Edmonds districts have increased about five percent each. The percentage of riders coming from greater central and downtown Seattle has remained steady at 14%. The percentage of riders coming from the Paine Field and South Everett districts has changed slightly. In 1993, 15% of trips originated in the Paine Field district while 6% originated in the South Everett district. In 1999, employment locations have apparently shifted, with only 9% of trips originating in the Paine Field district and 10% originating in the South Everett District.

The northward shift seen for westbound riders appears to be taking place for eastbound riders as well, as shown in Table 14-15 and Figure 14-2. Origin locations reported by eastbound riders increased by seven percent for travelers coming from north Whidbey Island and by two percent for passengers coming from central Whidbey Island. Destination locations also appear to be shifting northward as well as southward, creating a more centralized pattern of destination locations. Destination locations in the greater central and central Seattle area has decreased to 12%, down from 19% in 1993, while the greater north Seattle and Mountlake Terrace areas have experienced an increase in the percentage of riders reporting these locations as their final destination. Downtown Everett also

experienced a drop in the percentage of riders reporting a final destination in this location, down to three percent for 1999 from 10% in 1993.

Westbound walk-on passenger origin and destination locations are shown in Table 14-16 and Figure 14-3. Westbound origin and destination locations for ferry passengers boarding in a vehicle are shown in Table 14-17 and illustrated in Figure 14-3 along with walk-on passengers. Generally, walk-on passengers display similar destination location patterns as passengers boarding in a vehicle, but with more distinct clusters at select locations. Eighteen percent of all walk-on passengers were coming from the Paine Field district, compared to six percent of those boarding the ferry by vehicle. Twenty-two percent of walk-on passengers reported coming from the greater central or downtown Seattle area, while only 11% of passengers boarding in a vehicle reported this origin location. This same pattern of a few concentrated locations can also be seen in destination locations for walk-on passengers, with 75% of walk-on passengers reporting locations in the south Whidbey Island district as their final destination. Ferry passengers boarding in a vehicle reported a much wider range of origin locations and a higher percentage of riders with a final destination in central or north Whidbey Island displaying a larger range of mobility.

Table 14-18 shows the origin and destination locations for eastbound walk-on passengers and Table 14-19 displays the origin and destination locations for eastbound passengers boarding in a vehicle, both of which are illustrated in Figure 14-4. As seen earlier for westbound riders, walk on passengers display a smaller range of locations than do vehicle board passengers. Note that in Table 14-18 no north Whidbey Island origin locations were reported, while vehicle board passengers reported not only locations in north Whidbey Island, but other locations off of Whidbey Island as well. Destination locations also display the greater concentration of walk-passengers in specific locations, with greater north Seattle locations reported most for both walk-on (29%) and passengers boarding in a vehicle (14%). Destination locations in the Lynnwood/Edmonds district was the next most common destination for walk-on passengers (21%), while Mountlake Terrace and greater central and downtown Seattle were the next most common destinations (12%) for passengers boarding in a vehicle.

Table 14-14
Mukilteo-Clinton O-D Trip Table
Weekday PM Peak Period – Westbound – All Boarding Modes

	DESTINATION	South Whidbey Island	Central Whidbey Island	North Whidbey Island	Origin Totals	Origin Shares
		1501	1502	1503		
ORIGIN						
Mukilteo	1504	49	4	7	60	2.6%
Paine Field	1505	138	62	6	207	8.9%
South Everett	1506	152	71	12	235	10.1%
Everett CBD	1507	120	36		156	6.7%
Other Greater Everett	1508	15			15	0.7%
Lynnwood/Edmonds	1509	227	100	21	348	15.0%
Mountlake Terrace	1510	137	48	4	189	8.1%
Other West Snohomish County/Camano Island	1511	62	15		77	3.3%
West Skagit/Island Counties	1512	4			4	0.2%
Greater Central Seattle/CBD	1513	234	80	3	317	13.7%
Greater South Seattle	1514	29	25	11	66	2.8%
Greater North Seattle	1515	167	60	8	235	10.1%
Bothell-Kirkland/Woodinville/Redmond	1516	97	54	11	162	7.0%
Greater Bellevue/Mercer Island	1517	45	21	8	73	3.1%
Southwest King County	1518	53	25	4	81	3.5%
Other West King County	1519	17	10		27	1.2%
Pierce/Thurston Counties	1520		10	11	21	0.9%
All Other Places	1521	35	11		46	2.0%
Destination Totals		1,582	632	106	2,319	100.0%
Destination Shares		68.2%	27.2%	4.6%	100.0%	

Figure 14-1
Mukilteo - Clinton Westbound PM Peak Trips
All Boarding Modes

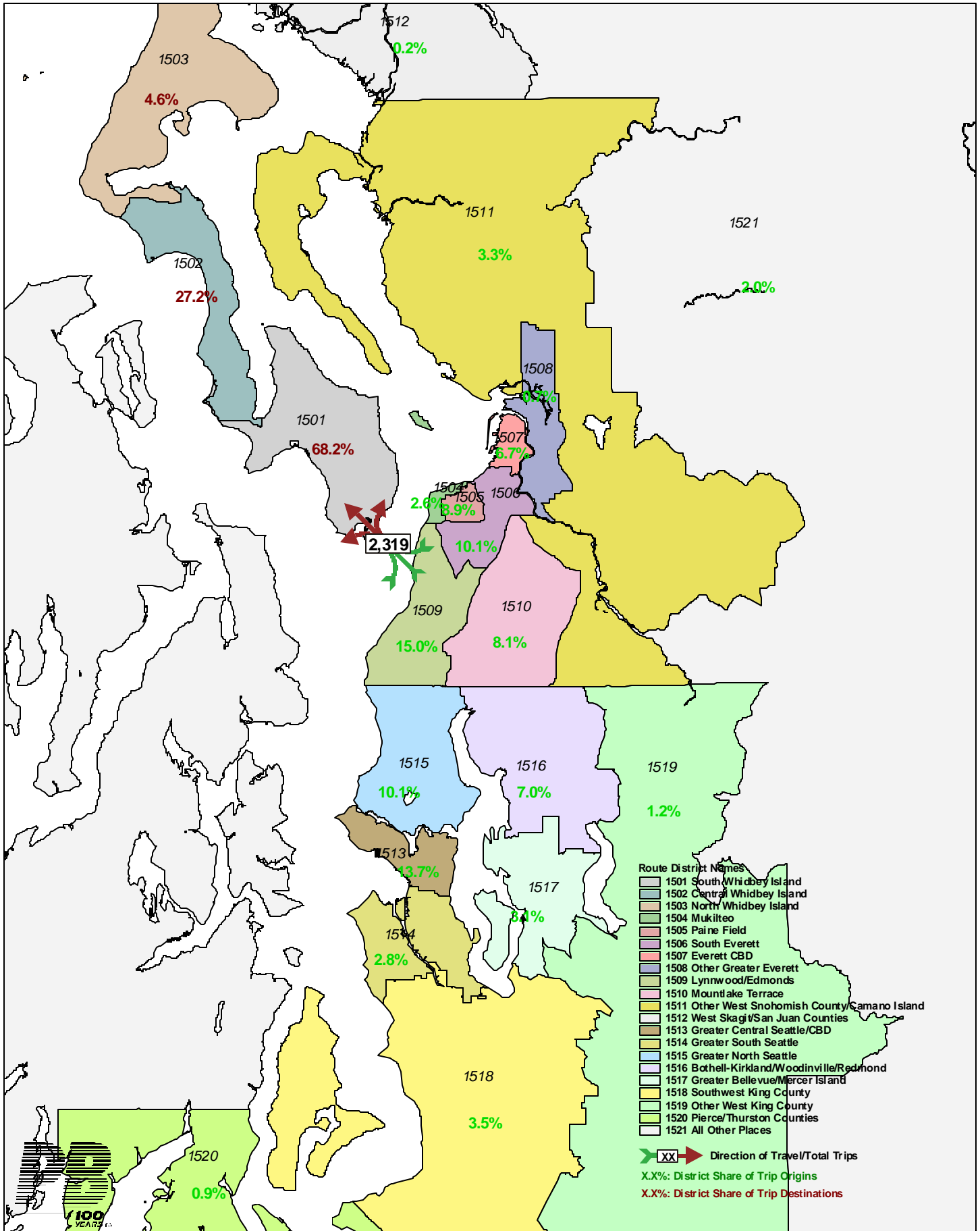


Table 14-15
Mukilteo-Clinton O-D Trip Table
Weekday PM Peak Period – Eastbound – All Boarding Modes

ORIGIN	DESTINATION																Origin Totals	Origin Shares	
		Mukilteo	South Everett	Everett CBD	Other Greater Everett	Lynnwood/Edmonds	Mountlake Terrace	Other West Snohomish County/Camano Island	Greater Central Seattle/CBD	Greater South Seattle	Greater North Seattle	Bonelli/Kirkland/Woodmillier/Redmond	Greater Bellevue/Mercer Island	Southwest King County	Other West King County	Pierce/Thurston Counties			All Other Places
South Whidbey Island	1501	12	40	19	4	74	54	30	59	49	91	28	42	11	21	4	19	556	52.4%
Central Whidbey Island	1502	9	8	4		27	27	4	28	16	35	27	12	37	4	4	12	257	24.2%
North Whidbey Island	1503		12	4		20	31	4	30	11	24	30	4	8	4	4	4	188	17.7%
West Skagit/Island Counties	1512		4						11		4	7						26	2.4%
All Other Places	1521						11					4					19	34	3.2%
Destination Totals		21	63	27	4	120	122	38	128	75	154	95	57	56	29	12	53	1,060	100.0%
Destination Shares		2.0%	6.0%	2.5%	0.4%	11.4%	11.5%	3.6%	12.1%	7.1%	14.5%	9.0%	5.4%	5.3%	2.7%	1.1%	5.0%	100.0%	

Figure 14-2
Mukilteo - Clinton Eastbound PM Peak Trips
All Boarding Modes

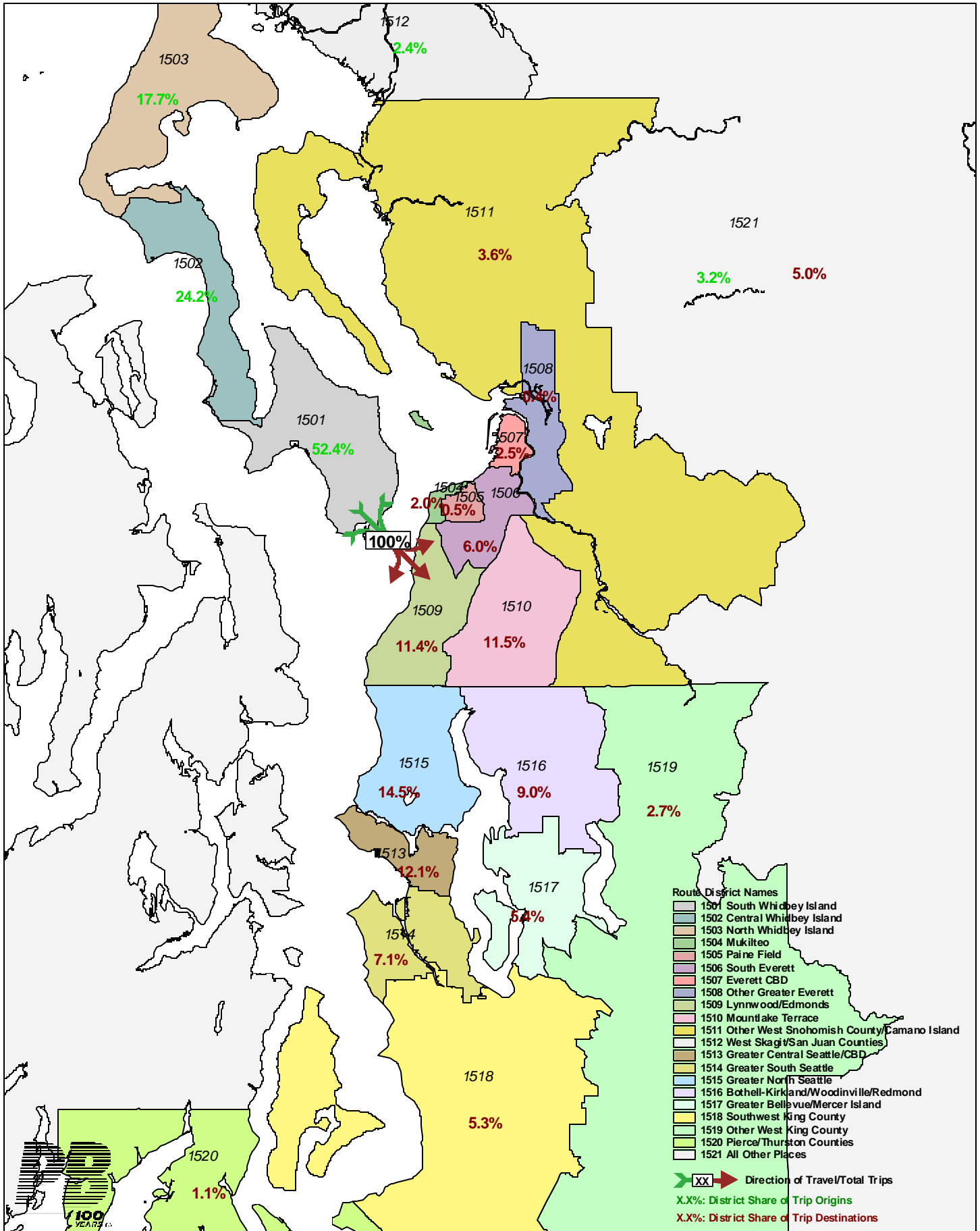


Table 14-16
Mukilteo-Clinton O-D Trip Table
Weekday PM Peak Period – Westbound – Walk-On Boardings

	DESTINATION	South Whidbey Island	Central Whidbey Island	North Whidbey Island	Origin Totals	Origin Shares
		1501	1502	1503		
ORIGIN						
Mukilteo	1504	10		3	13	2.2%
Paine Field	1505	75	26	6	107	18.2%
South Everett	1506	36	10		45	7.7%
Everett CBD	1507	55	13		68	11.6%
Lynnwood/Edmonds	1509	75	19	3	97	16.6%
Mountlake Terrace	1510	16	3		19	3.3%
Other West Snohomish County/Camano Island	1511	6			6	1.1%
Greater Central Seattle/CBD	1513	91	36	3	130	22.1%
Greater South Seattle	1514	6	10		16	2.8%
Greater North Seattle	1515	36	3		39	6.6%
Bothell-Kirkland/Woodinville/Redmond	1516	16	6	3	26	4.4%
Greater Bellevue/Mercer Island	1517	10	3		13	2.2%
Southwest King County	1518	6			6	1.1%
Destination Totals		439	130	19	588	100.0%
Destination Shares		74.6%	22.1%	3.3%	100.0%	

Table 14-17
Mukilteo-Clinton O-D Trip Table
Weekday PM Peak Period – Westbound – In-Vehicle Boardings

	DESTINATION	South Whidbey Island	Central Whidbey Island	North Whidbey Island	Origin Totals	Origin Shares
		1501	1502	1503		
ORIGIN						
Mukilteo	1504	39	4	4	47	2.7%
Paine Field	1505	64	36		100	5.8%
South Everett	1506	116	61	12	190	11.0%
Everett CBD	1507	65	23		88	5.1%
Other Greater Everett	1508	15			15	0.9%
Lynnwood/Edmonds	1509	153	81	17	251	14.5%
Mountlake Terrace	1510	121	45	4	169	9.8%
Other West Snohomish County/Camano Island	1511	55	15		70	4.1%
West Skagit/Island Counties	1512	4			4	0.2%
Greater Central Seattle/CBD	1513	143	44		187	10.8%
Greater South Seattle	1514	23	15	11	49	2.8%
Greater North Seattle	1515	131	57	8	196	11.3%
Bothell-Kirkland/Woodinville/Redmond	1516	81	48	8	136	7.9%
Greater Bellevue/Mercer Island	1517	35	17	8	60	3.5%
Southwest King County	1518	46	25	4	75	4.3%
Other West King County	1519	17	10		27	1.6%
Pierce/Thurston Counties	1520		10	11	21	1.2%
All Other Places	1521	35	11		46	2.7%
Destination Totals		1,143	502	86	1,731	100.0%
Destination Shares		66.0%	29.0%	5.0%	100.0%	

Figure 14-3
Mukilteo - Clinton Westbound PM Peak Period
Trip Origins & Destinations by Boarding Mode

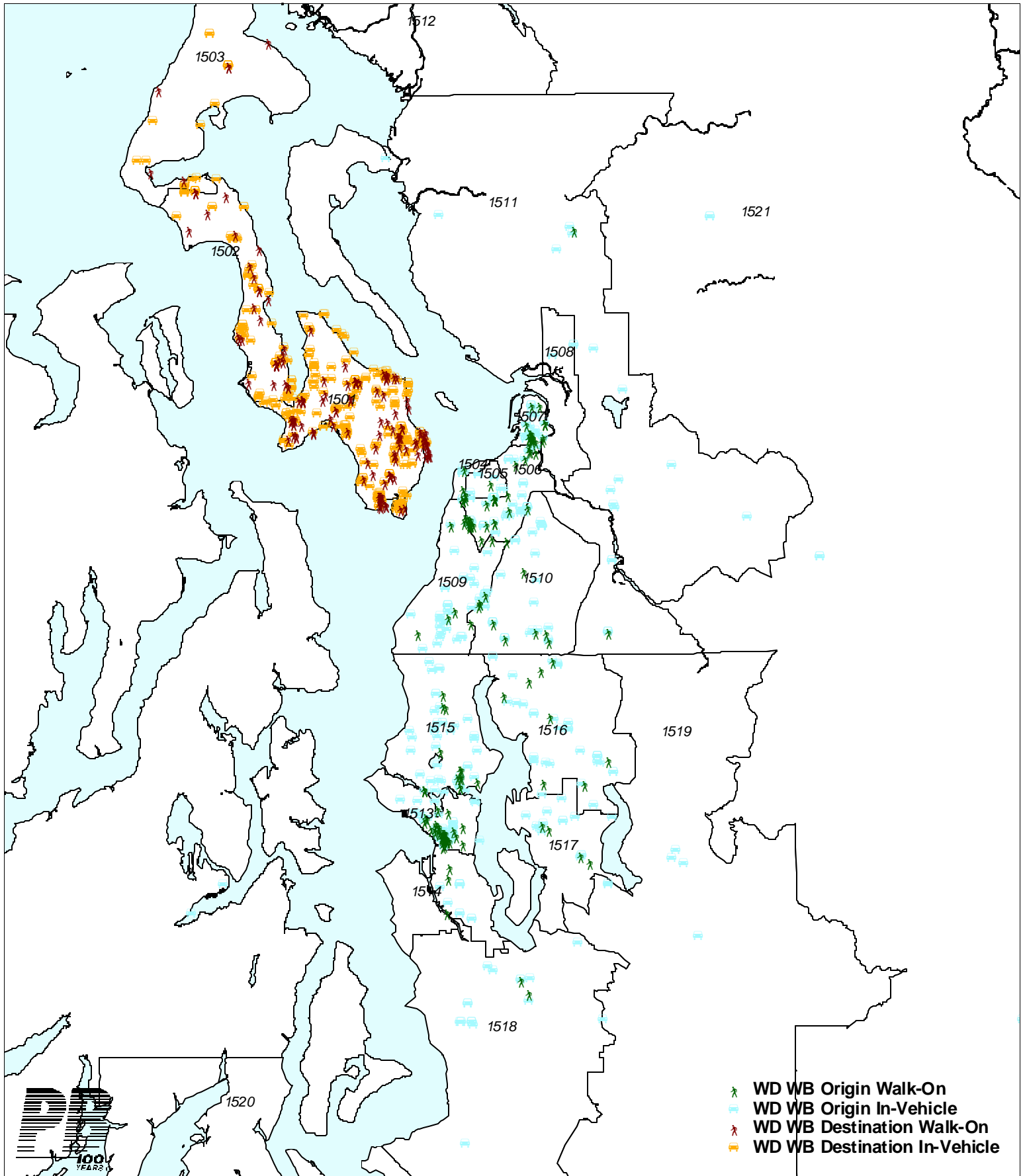


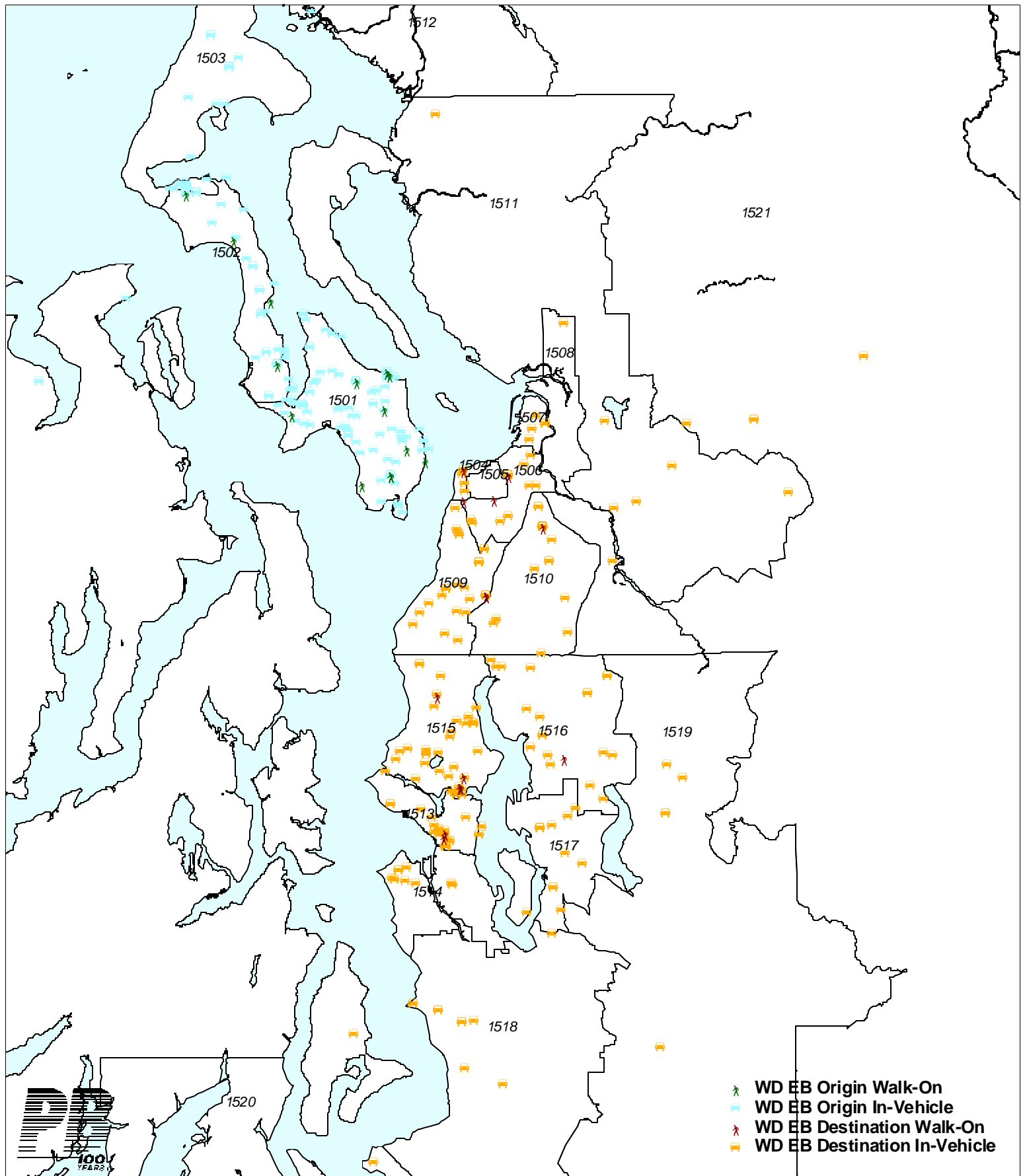
Table 14-18
Mukilteo-Clinton O-D Trip Table
Weekday PM Peak Period – Eastbound – Walk-On Boardings

ORIGIN	DESTINATION							Origin Totals	Origin Shares
		Mukilteo 1504	South Everett 1506	Lynnwood/Edmonds 1509	Mountlake Terrace 1510	Greater Central Seattle/CBD 1513	Greater North Seattle 1515	Bothell-Kirkland/Woodinville/Redmond 1516	
South Whidbey Island	1501		5	15	5	5	15	5	71.4%
Central Whidbey Island	1502	5				5	5	20	28.6%
Destination Totals		5	5	15	5	10	20	5	100.0%
Destination Shares		7.1%	7.1%	21.4%	7.1%	14.3%	28.6%	7.1%	

Table 14-19
Mukilteo-Clinton O-D Trip Table
Weekday PM Peak Period – Eastbound – In-Vehicle Boardings

ORIGIN	DESTINATION																	Origin Totals	Origin Shares
		Mukilteo 1504	South Everett 1506	Everett CBD 1507	Other Greater Everett 1508	Lynnwood/Edmonds 1509	Mountlake Terrace 1510	Other West Snohomish County/Garano Island 1511	Greater Central Seattle/CBD 1513	Greater South Seattle 1514	Greater North Seattle 1515	Bothell-Kirkland/Woodinville/Redmond 1516	Greater Bellevue/Mercer Island 1517	Southwest King County 1518	Other West King County 1519	Pierce/Thurston Counties 1520	All Other Places 1521		
South Whidbey Island	1501	12	35	19	4	59	49	30	54	49	76	23	42	11	21	4	19	505	51.1%
Central Whidbey Island	1502	4	8	4		27	27	4	23	16	30	27	12	37	4	4	12	236	23.9%
North Whidbey Island	1503		12	4		20	31	4	30	11	24	30	4	8	4	4	4	188	19.0%
West Skagit/Island Counties	1512		4						11		4	7						26	2.6%
All Other Places	1521						11					4					19	34	3.4%
Destination Totals		16	58	27	4	105	117	38	118	75	134	90	57	56	29	12	53	989	100.0%
Destination Shares		1.6%	5.9%	2.7%	0.4%	10.6%	11.8%	3.8%	11.9%	7.6%	13.5%	9.1%	5.8%	5.6%	2.9%	1.2%	5.4%	100.0%	

Figure 14-4
Mukilteo - Clinton Eastbound PM Peak Period
Trip Origins & Destinations by Boarding Mode



14.2.2 Sunday Survey Period Trip Patterns

Sunday survey period origin and destination locations for westbound travel are presented in Table 14-20 and illustrated in Figure 14-5. Generally, there is a much more even distribution of destination locations for Sunday survey period respondents than was found for weekday PM peak period riders, with an approximate 60% to 40% split between destinations in the south Whidbey Island and north and central Whidbey Island districts. Compared to the 1993 survey, more Sunday respondents traveled to the north Whidbey Island district in 1999 at 16%, compared to 11% in 1993. Typically origin locations are quite similar to those of weekday riders, with the percentage of origin locations in the Lynnwood/Edmonds district at 14%, greater north Seattle at 13% and origin locations in greater central and downtown Seattle at 10%.

Eastbound origin and destination location information for all boarding modes is presented in Table 14-21 and illustrated in Figure 14-6. Compared to the 1993 survey data, again a greater percentage of eastbound respondents reported origins in the north Whidbey Island district, with 17% in 1999 compared to 12% in 1993. Destination locations remained generally the same with the greater north Seattle district the most common destination at 18%.

Figure 14-7 and Figure 14-8 graphically display the origin and destination locations of Sunday survey period respondents for the westbound and eastbound directions by boarding mode. As was found for weekday riders, those boarding the ferry in a vehicle had a much wider range of locations than did walk-on respondents, who tended to have locations concentrated in the south Whidbey Island, Mukilteo, and greater north Seattle districts.

Table 14-20
Mukilteo-Clinton O-D Trip Table
Sunday Survey Period – Westbound – All Boarding Modes

ORIGIN	DESTINATION	South Whidbey Island	Central Whidbey Island	North Whidbey Island	West Skagit/Island Counties	All Other Places	Origin Shares
		1501	1502	1503	1512	1521	
Mukilteo	1504	1.7%					1.7%
Paine Field	1505					0.2%	0.2%
South Everett	1506	4.6%	2.2%	0.2%			7.1%
Everett CBD	1507	2.2%			0.2%		2.4%
Other Greater Everett	1508	1.5%	0.2%	0.5%			2.2%
Lynnwood/Edmonds	1509	8.3%	3.9%	2.0%			14.1%
Mountlake Terrace	1510	5.4%	2.2%	0.2%			7.8%
Other West Snohomish County/Camano Island	1511	4.9%	2.7%	0.7%			8.3%
West Skagit/Island Counties	1512			0.2%			0.2%
Greater Central Seattle/CBD	1513	5.1%	1.2%	3.2%	0.2%	0.5%	10.2%
Greater South Seattle	1514	1.0%	0.5%	1.2%			2.7%
Greater North Seattle	1515	5.6%	4.4%	2.9%			12.9%
Bothell-Kirkland/Woodinville/Redmond	1516	3.4%	2.0%				5.4%
Greater Bellevue/Mercer Island	1517	2.7%	1.2%	1.0%		0.5%	5.4%
Southwest King County	1518	5.1%	2.9%	2.0%	0.2%		10.2%
Other West King County	1519	1.5%	1.2%	0.7%			3.4%
Pierce/Thurston Counties	1520	0.7%		0.5%			1.2%
All Other Places	1521	2.7%	0.7%	0.5%		0.5%	4.4%
Destination Shares		56.3%	25.4%	15.9%	0.7%	1.7%	100.0%

Figure 14-5
Mukilteo - Clinton Westbound Sunday Survey Period Trips
All Boarding Modes

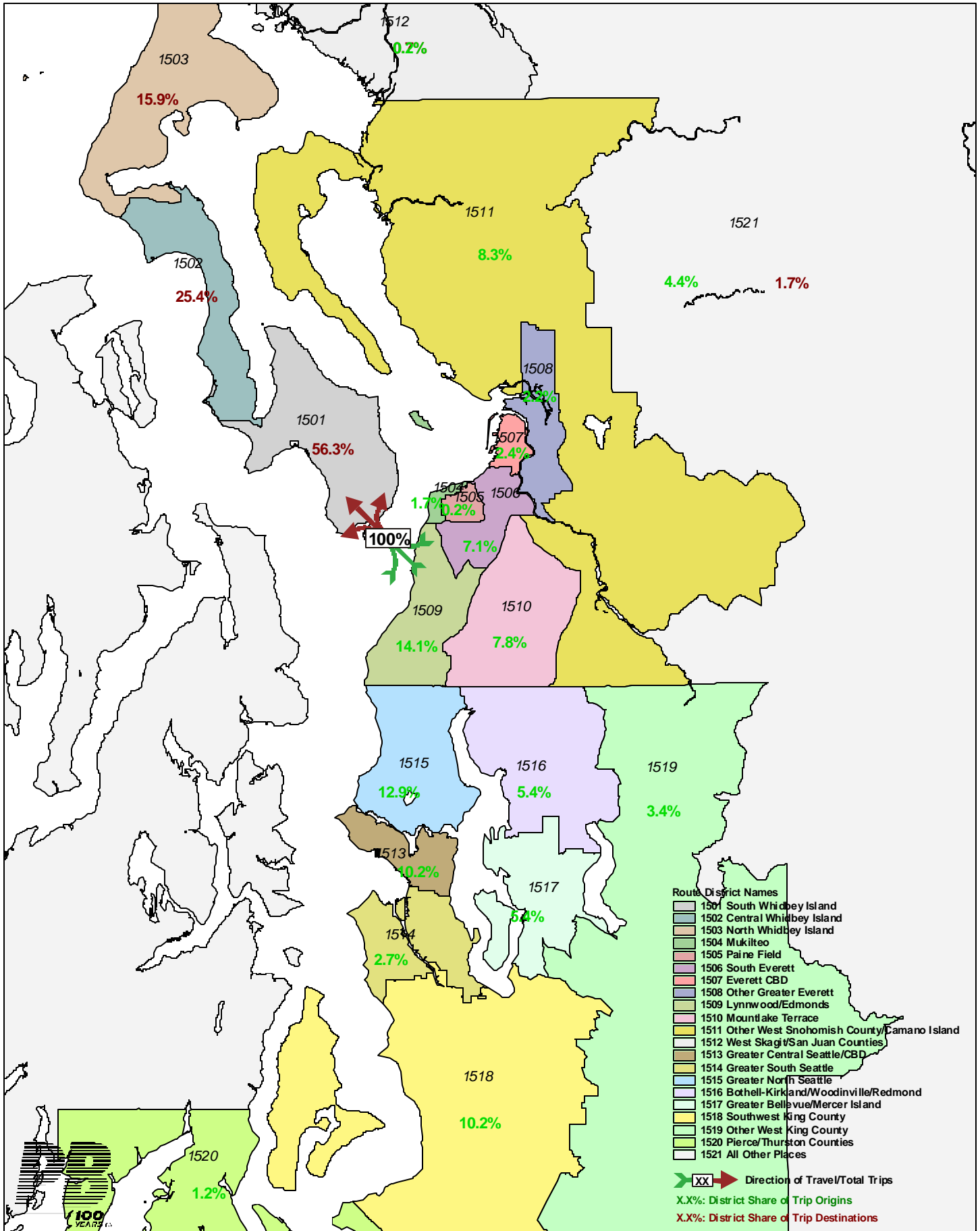


Table 14-21
Mukilteo-Clinton O-D Trip Table
Sunday Survey Period – Eastbound – All Boarding Modes

ORIGIN	DESTINATION																		Origin Shares
		Mukilteo	Paine Field	South Everett	Everett CBD	Other Greater Everett	Lynnwood/Edmonds	Mountlake Terrace	Other West Snohomish County/Cannero Island	Greater Central Seattle/CBD	Greater South Seattle	Greater North Seattle	Bothell-Kirkland/Woodinville/Redmond	Greater Bellevue/Mercer Island	Southwest King County	Other West King County	Pierce/Thurston Counties	All Other Places	
		1504	1505	1506	1507	1508	1509	1510	1511	1513	1514	1515	1516	1517	1518	1519	1520	1521	
South Whidbey Island	1501	1.8%		2.4%	0.6%	0.6%	8.5%	3.0%	3.0%	4.8%	2.0%	9.1%	3.0%	2.6%	3.0%	1.6%	0.2%	2.4%	48.8%
Central Whidbey Island	1502	0.2%		1.0%	0.2%	0.4%	3.0%	2.0%	1.4%	1.2%	1.2%	4.8%	2.6%	1.4%	2.4%	1.4%	1.2%	1.2%	25.8%
North Whidbey Island	1503	0.4%		2.2%	0.2%	0.6%	1.2%	0.8%	0.2%	2.0%	1.0%	3.2%	1.2%	1.2%	0.6%	0.8%		0.8%	16.5%
West Skagit/Island Counties	1512					0.2%				0.4%		0.2%	0.2%		0.4%	0.4%	0.2%		2.0%
All Other Places	1521		0.2%		0.4%			1.6%	0.2%	0.8%		0.6%	1.0%		0.6%		1.0%	0.4%	6.9%
Destination Shares		2.4%	0.2%	5.6%	1.4%	1.8%	12.7%	7.5%	4.8%	9.3%	4.2%	17.9%	8.1%	5.2%	7.1%	4.2%	2.6%	4.8%	100.0%

Figure 14-6
Mukilteo - Clinton Eastbound Sunday Survey Period Trips
All Boarding Modes

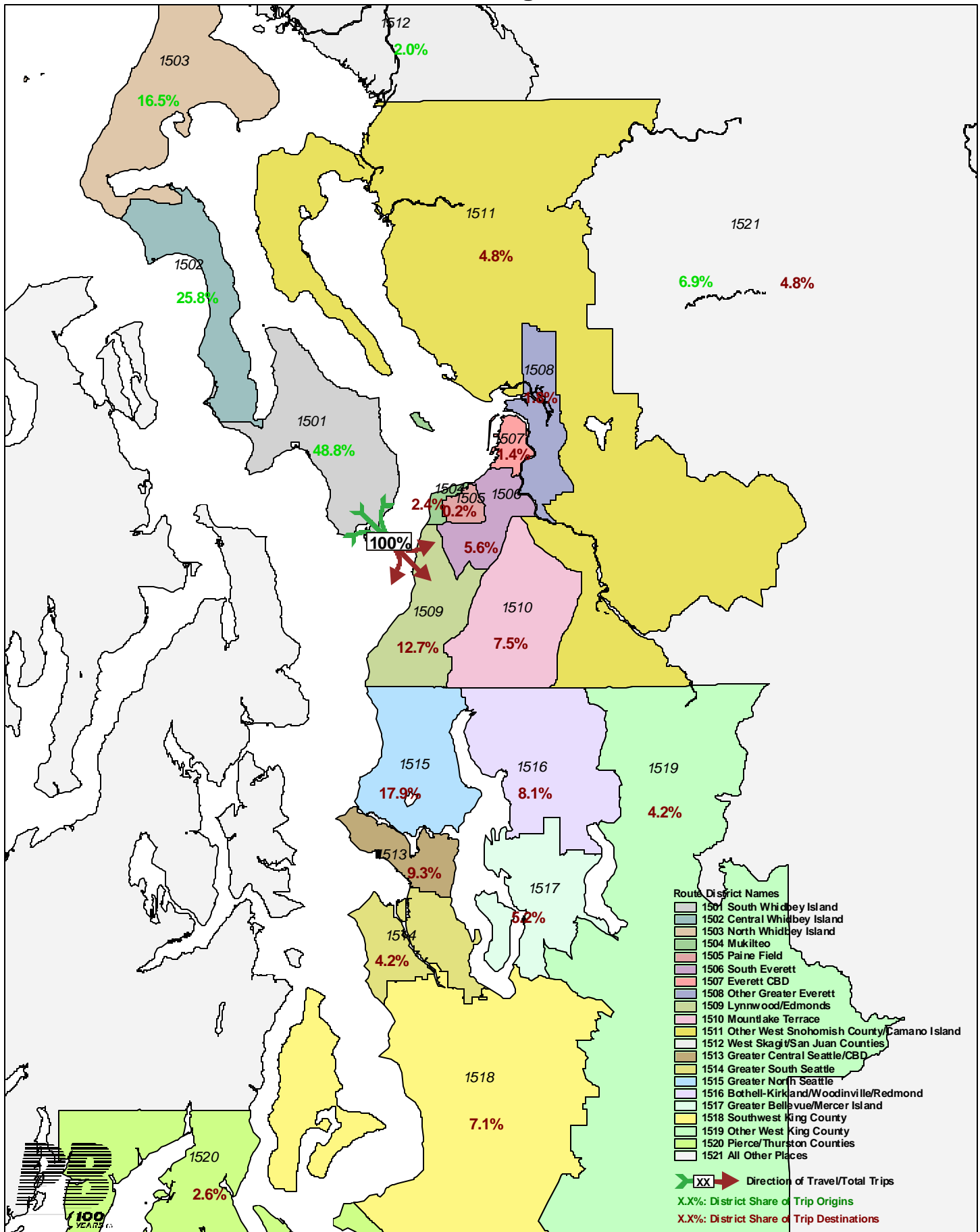


Figure 14-7
Mukilteo - Clinton Westbound Sunday Survey Period
Trip Origins & Destinations by Boarding Mode

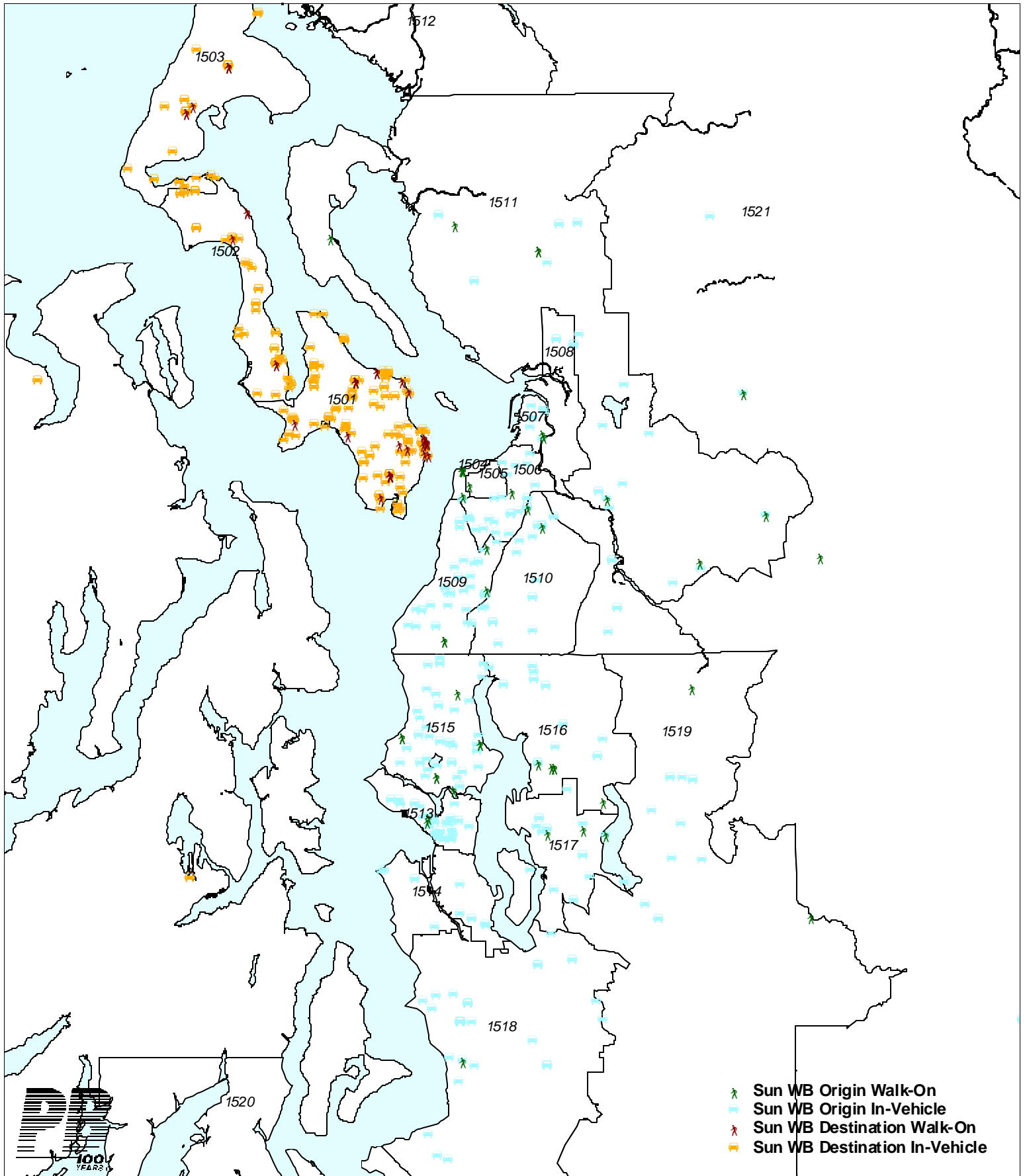


Figure 14-8
Mukilteo - Clinton Eastbound Sunday Survey Period
Trip Origins & Destinations by Boarding Mode

